ABSTRACT

The invention relates to a method and arrangement for reducing cyclo-stationary cross-talk noise and more particularly to mitigate the effects of cyclo-stationary cross-talk noise from narrow band time divided duplex (TDD) systems into a wide band transmission system within a copper wire-pair transmission network. The TDD system operates in a lower part of the spectrum. In accordance with the invention, the wide band transmission system operates with frequency divided duplex (FDD). The wide band is divided in at least two bands, such that the lower band is at least partly overlapping the time divided duplex system. The lower and the higher band are transmitting in opposite directions. The transmission direction of the frequency bands is switched so that the lower band of the wide band transmission system always transmits in the same direction as the time divided duplex system. With this arrangement the near end cross-talk from the TDD system into the wide band transmission system is avoided and the far end cross-talk from the TDD system will be the limiting noise source.